In the claims:

1. - 16. (Canceled)

17. (New) A method of generating an image of a terrestrial region upon which electromagnetic energy from an electromagnetic energy source is incident, said method comprising the steps of:

(a) passively collecting non-scattered electromagnetic energy emitted by said electromagnetic energy source by way of at least one first passive electromagnetic energy collector that is exclusive of any electromagnetic energy emission element employed by said electromagnetic energy source to emit said electromagnetic energy;

(b) passively collecting, by at least one second passive electromagnetic energy collector moving arbitrarily and independently of said electromagnetic energy source among a plurality of distributed energy collection locations, electromagnetic energy emitted by said electromagnetic energy source and scattered by features of said terrestrial region of interest, said at least one second passive electromagnetic energy collector being exclusive of any electromagnetic energy transmission element employed by said electromagnetic energy source;

(c) processing a reference signal representative of electromagnetic energy collected in step (a), in accordance with information representative of the collection geometry of said at least one first passive energy collector and the geolocation of

said electromagnetic energy source, so as to derive a time- and location-corrected reference signal;

(d) correlating the time- and location-corrected reference signal derived in step (c) with an image signal representative of electromagnetic energy collected by said at least one moving second passive energy collector in step (b), so as to derive composite amplitude and phase values of scattering components for plural locations of said terrestrial region as received by said at least one moving second passive energy collector as a function of spatial position; and

(e) processing said composite scattering components derived in step (d) to produce said multidimensional image of said terrestrial region of interest.

18. (New) A method according to claim 17, wherein said electromagnetic energy source comprises a television signal transmitter tower, and step (b) comprises passively collecting electromagnetic energy emitted by said television signal transmitter tower, and scattered by features of said terrestrial region of interest, by means of an airborne or spaceborne electromagnetic energy collection platform moving among said plurality of distributed energy collection locations.

19. (New) A system for deriving image information representative of cultural features of a terrestrial region illuminated by an RF transmitter comprising:

a passive reference signal collection subsystem which is operative to passively collect non-scattered RF energy emitted by said RF transmitter illuminating said terrestrial region, and which is exclusive of any component of said RF transmitter used to emit said RF energy;

a passive dynamic scattered image energy subsystem which is exclusive of any component of said RF transmitter and is operative to travel past said terrestrial region along a path that is arbitrary and independent of said RF transmitter, and passively collect from plural non-coincident viewing paths of said terrestrial region, RF energy scattered from points of cultural features within a three-dimensional volume of space containing said terrestrial region; and

a collected signal processing subsystem, which is operative to process information representative of said non-scattered RF energy as collected by said reference signal collection subsystem, to derive a coherent reference signal corresponding to that transmitted by said RF transmitter illuminating said terrestrial region, time- and location-corrected as necessary to points within said three-dimensional volume of space, and to correlate said coherent reference signal with a scattered RF energy signal representative of electromagnetic energy collected by said dynamic scattered image energy subsystem, time- and location-corrected as necessary to said points within said three-dimensional volume of space, so as to derive composite amplitude and phase values of scattering components for said points of said three-dimensional

space.

20. (New) A system according to claim 19, further including an image generator subsystem, which is operative to process said composite amplitude and phase values of scattering components for said points of said three-dimensional space to produce a multidimensional image of cultural features of said terrestrial region.

21. (New) A system according to claim 19, wherein said passive reference signal collection subsystem and said passive dynamic scattered image energy subsystem are configured to employ a common passive RF energy collector that simultaneously and passively collects said non-scattered RF energy emitted by said RF transmitter illuminating said terrestrial region, and RF energy scattered from points of cultural features within said three-dimensional volume of space containing said terrestrial region.

22. (New) A system according to claim 19, wherein said passive reference signal collection subsystem and said passive dynamic scattered image energy subsystem employ respectively separate passive RF energy collectors that simultaneously passively collect said non-scattered RF energy emitted by said RF transmitter illuminating said terrestrial region, and RF energy scattered from points of cultural features within said three-dimensional volume of space containing said terrestrial region.

23. (New) A system according to claim 21, wherein said collected signal processing subsystem includes:

a coherent reference signal processing section having a first Lorentz transform operator that accounts for signal propagation delay from said transmitter to said passive reference signal collection subsystem, and performs a Lorentz transform of an RF energy signal received thereby to a static frame of reference of a respective point in said three-dimensional space, and a delay associated with said reference signal's propagation time from said transmitter to said respective point, so as to effectively transform a reference signal component of RF energy received at the collection aperture of said passive reference signal collection subsystem to said respective point, and

a dynamic scattered signal processing section having a second Lorentz transform operator which accounts for signal propagation delay and performs a second Lorentz transform of RF energy received by said passive dynamic scattered image energy subsystem from its moving frame of reference to the static frame of reference of said respective point in said three-dimensional space.

24. (New) A system according to claim 23, wherein said passive dynamic scattered signal processing section includes a reference signal suppression operator coupled to remove a reference signal component from the scattered image component of

RF energy received by said passive dynamic scattered image energy subsystem.

25. (New) A system according to claim 24, wherein said collected signal processing subsystem includes a correlator, which is operative to correlate the output of said dynamic scattered signal processing section with the output of said coherent reference signal processing section, to derive composite amplitude and phase values of scattering components for said points of said three-dimensional space.

26. (New) A system according to claim 25, further including an image generator subsystem, which is operative to process said composite amplitude and phase values of scattering components for said points of said three-dimensional space to produce a multidimensional image of cultural features of said terrestrial region.

27. (New) A method for passively deriving image information representative of cultural features of a region illuminated by an RF transmitter comprising:

(a) providing a coherent reference signal representative of RF energy emitted by said RF transmitter illuminating said terrestrial region;

(b) passively collecting, from a dynamic passive energy collector, that is exclusive of any electromagnetic energy

emission element employed by said RF transmitter and traverses a plurality of mutually offset travel paths offset from said terrestrial region that are arbitrary and independent of said RF transmitter, RF energy scattered, as a result of illumination by RF energy emitted by said RF transmitter, from points that are capable of defining cultural features within a three-dimensional volume of space containing said terrestrial region; and

(c) correlating said coherent reference signal, time- and location-corrected as necessary to said points within said three-dimensional volume of space, with a scattered RF energy signal representative of electromagnetic energy collected by said dynamic passive energy collector, time- and location-corrected as necessary to said points within said three-dimensional volume of space, so as to derive composite amplitude and phase values of scattering components for said points of said three-dimensional space.

28. (New) A method according to claim 27, further including the step (d) of processing said composite amplitude and phase values of scattering components for said points of said three-dimensional space to produce a multidimensional image of cultural features of said terrestrial region.

29. (New) A method according to claim 27, wherein steps (a) and (b) include employing a common passive RF energy collector to simultaneously collect non-scattered RF energy emitted by said RF

transmitter illuminating said terrestrial region, and RF energy scattered from said points of cultural features within said three-dimensional volume of space containing said terrestrial region.

30. (New) A method according to claim 27, wherein steps (a) and (b) include employing respectively separate passive RF energy collectors to collect RF energy emitted by said RF transmitter illuminating said terrestrial region, and RF energy scattered from said points of cultural features within said three-dimensional volume of space containing said terrestrial region.

31. (New) A method according to claim 29, wherein step (c) comprises:

(c1) processing said coherent reference signal in accordance with a first Lorentz transform that accounts for signal propagation delay from said transmitter to a passive collector for said reference signal and performs a Lorentz transform of an RF energy signal received thereby to a static frame of reference of a respective point in said three-dimensional space, and providing a delay associated with said reference signal's propagation time from said transmitter to said respective point, so as to effectively transform a reference signal component of RF energy received by said passive collector to said respective point, and

(c2) processing said scattered RF energy signal in accordance with a second Lorentz transform operator which accounts for signal propagation delay and performs a second Lorentz transform of RF

energy received by a passive collector for said scattered RF energy signal from its moving frame of reference to the static frame of reference of said respective point in said three-dimensional space.

32. (New) A method according to claim 31, wherein step (c2) includes processing said scattered RF energy signal in accordance with a reference signal suppression operator that is operative to remove a reference signal component from said scattered RF energy signal.